PROCESS & INDUSTRIAL FABRICATION CO.

MAILING ADDRESS
P.O. Box 446 • Brimfield, Illinois 61517
FABRICATION FACILITY
6100 S.W. Washington St. • Bartonville, Illinois 61607
PH. 309-697-9518

A.S.M.E.-A.-U.-P.P.
Pressure Code Fabrication

Systems Design
Module & Skid Mounting

Oil Reclamation Systems
Control Panels

August 23, 1984

Mr. William Child
Deputy Division Manager
Land Pollution Control
Illinois Environmental Protection Agency
Permit Section - Land & Air
2200 Churchill Road
Springfield, Illinois 62706

Subject: Permit Forms for Air and Land Pollution Control for Process & Industrial Fabrication Company's Proposal for the Cyanide Tainted Film Chips Disposal

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Dear Sir,

Attached please find two (2) copies of the Air and Land Pollution Control completed forms.

The financial assurance referred to in the Land section is the normal bond required by any operator or construction company while doing business on a site.

Due to the shortage of time alloted for the completion of these forms, I am assuming that there are some omissions in this initial presentation. If clarification of any areas are required, please do not hesitate to contact me and I will up-date and resubmit any section necessary in a more detailed manner.

Sincerely,

Calvin J. Bragg, B.S.Ch.E.
President

CJB/rm
encl.
vec

STATE OF ILLINOIS
ENVIRONMENTAL PROTECTION AGENCY
DIVISION OF AIR POLLUTION CONTROL
2200 CHURCHILL ROAD
SPRINGFIELD, ILLINOIS 62706

This Agency is authorized to require this information under Illinois Revised Statutes, 1979, Chapter 111 1/2, Section 1039. Disclosure of this information is required under that Section. Failure to do so may prevent this form from being processed and could result in your application being denied. This form has been approved by the Forms Management Center.

APPLICATION FOR A PERMIT(A)
☐ CONSTRUCT ☒ OPERATE

NAME OF EQUIPMENT TO BE CONSTRUCTED OR OPERATED: PIFCO - DESTRUCTIVE DISTILLATION UNIT

FOR AGENCY USE ONLY
I. D. NO. 031126AAQ
PERMIT NO. 84 08 0081
DATE 8-28-84

1a. NAME OF OWNER:		2a. NAME OF OPERATOR: PROCESS & INDUSTRIAL FABRICATION COMPANY	
1b. STREET ADDRESS OF OWNER:		2b. STREET ADDRESS OF OPERATOR: 6100 S.W. WASHINGTON STREET	
1c. CITY OF OWNER:		2c. CITY OF OPERATOR: BARTONVILLE	
1d. STATE OF OWNER:	1e. ZIP CODE:	2d. STATE OF OPERATOR: ILLINOIS	2e. ZIP CODE: 61607

3a. NAME OF CORPORATE DIVISION OR PLANT: GEMINI LEASING		3b. STREET ADDRESS OF EMISSION SOURCE: 6201 SOUTH EAST AVENUE		
3c. CITY OF EMISSION SOURCE: HODGKINS	3d. LOCATED WITHIN CITY LIMITS: ☐ YES ☐ NO	3e. TOWNSHIP:	3f. COUNTY: COOK	3g. ZIP CODE:

4. ALL CORRESPONDENCE TO: (TITLE AND/OR NAME OF INDIVIDUAL) C. J. BRAGG	5. TELEPHONE NUMBER FOR AGENCY TO CALL: (312) 748-7200/(309) 697-9518
6. ADDRESS FOR CORRESPONDENCE: (CHECK ONLY ONE) ☐ OWNER: ☒ OPERATOR ☐ EMISSION SOURCE	7. YOUR DESIGNATION FOR THIS APPLICATION:(C) GEMINI - PIFCO

8. THE UNDERSIGNED HEREBY MAKES APPLICATION FOR A PERMIT AND CERTIFIES THAT THE STATEMENTS CONTAINED HEREIN ARE TRUE AND CORRECT, AND FURTHER CERTIFIES THAT ALL PREVIOUSLY SUBMITTED INFORMATION REFERENCED IN THIS APPLICATION REMAINS TRUE, CORRECT AND CURRENT. BY AFFIXING HIS SIGNATURE HERETO HE FURTHER CERTIFIES THAT HE IS AUTHORIZED TO EXECUTE THIS APPLICATION.

AUTHORIZED SIGNATURE(S):(D)

BY _____ DATE
SIGNATURE
TYPED OR PRINTED NAME OF SIGNER
TITLE OF SIGNER

RECEIVED
AUG 28 1984
IEPA - DAPC - SPFLD

BY Calvin J. Bragg 8/23/84
SIGNATURE DATE
CALVIN J. BRAGG
TYPED OR PRINTED NAME OF SIGNER
PRESIDENT
TITLE OF SIGNER

(A) THIS FORM IS TO PROVIDE THE AGENCY WITH GENERAL INFORMATION ABOUT THE EQUIPMENT TO BE CONSTRUCTED OR OPERATED. THIS FORM MAY ONLY BE USED TO REQUEST ONE TYPE OF PERMIT - CONSTRUCTION OR OPERATION - AND NOT BOTH.

(B) ENTER THE GENERIC NAME OF THE EQUIPMENT TO BE CONSTRUCTED OR OPERATED. THIS NAME WILL APPEAR ON THE PERMIT WHICH MAY BE ISSUED PURSUANT TO THIS APPLICATION. THIS FORM MUST BE ACCOMPANIED BY OTHER APPLICABLE FORMS AND INFORMATION.

(C) PROVIDE A DESIGNATION IN ITEM 7 ABOVE WHICH YOU WOULD LIKE THE AGENCY TO USE FOR IDENTIFICATION OF YOUR EQUIPMENT. YOUR DESIGNATION WILL BE REFERENCED IN CORRESPONDENCE FROM THIS AGENCY RELATIVE TO THIS APPLICATION. YOUR DESIGNATION MUST NOT EXCEED TEN (10) CHARACTERS.

(D) THIS APPLICATION MUST BE SIGNED IN ACCORDANCE WITH PCB REGS., CHAPTER 2, PART 1, RULE 103(a)(4) OR 103(b)(5) WHICH STATES: "ALL APPLICATIONS AND SUPPLEMENTS THERETO SHALL BE SIGNED BY THE OWNER AND OPERATOR OF THE EMISSION SOURCE OR AIR POLLUTION CONTROL EQUIPMENT, OR THEIR AUTHORIZED AGENT, AND SHALL BE ACCOMPANIED BY EVIDENCE OF AUTHORITY TO SIGN THE APPLICATION."

IF THE OWNER OR OPERATOR IS A CORPORATION, SUCH CORPORATION MUST HAVE ON FILE WITH THE AGENCY A CERTIFIED COPY OF A RESOLUTION OF THE CORPORATION'S BOARD OF DIRECTORS AUTHORIZING THE PERSONS SIGNING THIS APPLICATION TO CAUSE OR ALLOW THE CONSTRUCTION OR OPERATION OF THE EQUIPMENT TO BE COVERED BY THE PERMIT.

☒ YES ☐ NO

IF A PLOT PLAN/MAP HAS PREVIOUSLY BEEN SUBMITTED, SPECIFY:

AGENCY I.D. NUMBER _ _ _ _ _ _ _ _ _ _ APPLICATION NUMBER _ _ _ _ _ _ _ _

IS THE APPROXIMATE SIZE OF APPLICANT'S PREMISES LESS THAN 1 ACRE?

☐ YES ☐ NO: SPECIFY _____ ACRES

10. DOES THIS APPLICATION CONTAIN A PROCESS FLOW DIAGRAM(S) THAT ACCURATELY AND CLEARLY REPRESENTS CURRENT PRACTICE.

☒ YES ☐ NO

11a. WAS ANY EQUIPMENT, COVERED BY THIS APPLICATION, OWNED OR CONTRACTED FOR, BY THE APPLICANT PRIOR TO APRIL 14, 1972:

☐ YES ☒ NO

IF "YES", ATTACH AN ADDITIONAL SHEET, EXHIBIT A, THAT:
(a) LISTS OR DESCRIBES THE EQUIPMENT
(b) STATES WHETHER THE EQUIPMENT WAS IN COMPLIANCE WITH THE RULES AND REGULATIONS GOVERNING THE CONTROL OF AIR POLLUTION PRIOR TO APRIL 14, 1972.

11b. HAS ANY EQUIPMENT, COVERED BY THIS APPLICATION, NOT PREVIOUSLY RECEIVED AN OPERATING PERMIT:

☒ YES ☐ NO

IF "YES", ATTACH AN ADDITIONAL SHEET, EXHIBIT B, THAT:
(a) LISTS OR DESCRIBES THE EQUIPMENT
(b) STATES WHETHER THE EQUIPMENT
(i) IS ORIGINAL OR ADDITIONAL EQUIPMENT
(ii) REPLACES EXISTING EQUIPMENT, OR
(iii) MODIFIES EXISTING EQUIPMENT
(c) PROVIDES THE ANTICIPATED OR ACTUAL DATES OF THE COMMENCEMENT OF CONSTRUCTION AND THE START-UP OF THE EQUIPMENT

12. IF THIS APPLICATION INCORPORATES BY REFERENCE A PREVIOUSLY GRANTED PERMIT(S), HAS FORM APC-210, "DATA AND INFORMATION--INCORPORATION BY REFERENCE" BEEN COMPLETED.

☐ YES ☒ NO

APPLICATION FOR OPERATING PERMIT ONLY

13. DOES THE STARTUP OF AN EMISSION SOURCE COVERED BY THIS APPLICATION PRODUCE AIR CONTAMINANT EMISSION IN EXCESS OF APPLICABLE STANDARDS:

☐ YES ☒ NO

IF "YES," HAS FORM APC-203, "OPERATION DURING STARTUP" BEEN COMPLETED FOR THIS SOURCE:

☐ YES ☐ NO

14. DOES THIS APPLICATION REQUEST PERMISSION TO OPERATE AN EMISSION SOURCE DURING MALFUNCTIONS OR BREAKDOWNS:

☐ YES ☒ NO

IF "YES," HAS FORM APC-204, "OPERATION DURING MALFUNCTION AND BREAKDOWN" BEEN COMPLETED FOR THIS SOURCE:

☐ YES ☐ NO

15. IS AN EMISSION SOURCE COVERED BY THIS APPLICATION SUBJECT TO A FUTURE COMPLIANCE DATE:

☐ YES ☒ NO

IF "YES," HAS FORM APC-202, "COMPLIANCE PROGRAM & PROJECT COMPLETION SCHEDULE," BEEN COMPLETED FOR THIS SOURCE:

☐ YES ☐ NO

16. DOES THE FACILITY COVERED BY THIS APPLICATION REQUIRE AN EPISODE ACTION PLAN (REFER TO GUIDELINES FOR EPISODE ACTION PLANS):

☐ YES ☒ NO

17. WAS THIS OPERATION THE SUBJECT OF A VARIANCE PETITION FILED WITH THE ILLINOIS POLLUTION CONTROL BOARD ON OR BEFORE JUNE 13, 1972:

☐ YES ☒ NO

IF "YES," CITE: PCB NUMBER(S) _____, DATE OF BOARD ORDER _____

WAS CONSTRUCTION OR MODIFICATION OF EQUIPMENT, SUFFICIENT TO ACHIEVE COMPLIANCE WITH THE "RULES AND REGULATIONS GOVERNING THE CONTROL OF AIR POLLUTION" EFFECTIVE PRIOR TO APRIL 14, 1972, COMMENCED PRIOR TO APRIL 14, 1972:

☐ YES ☐ NO

IF "YES," EXPLAIN IN DETAIL, AND IDENTIFY EXPLANATION AS EXHIBIT D.

18. LIST AND IDENTIFY ALL FORMS, EXHIBITS, AND OTHER INFORMATION SUBMITTED AS PART OF THIS APPLICATION. INCLUDE THE PAGE NUMBERS ON EACH ITEM (ATTACH ADDITIONAL SHEETS IF NECESSARY):

TOTAL NUMBER OF PAGES _____

STATE OF ILLINOIS
ENVIRONMENTAL PROTECTION AGENCY
DIVISION OF AIR POLLUTION CONTROL
2200 CHURCHILL ROAD
SPRINGFIELD, ILLINOIS 62706

This Agency is authorized to require this information under Illinois Revised Statutes, 1979, Chapter 111 1/2, Section 1039. Disclosu of this information is required under that Section. Failure to do so m prevent this form from being processed and could result in your application being denied. This form has been approved by the Form Management Center.

DISPOSITION OF WASTE MATERIALS(A)

NAME OF EQUIPMENT OR PROCESS TO BE CONSTRUCTED OR OPERATED (B) _____

FOR AGENCY USE ONLY

REFERENCE I.D. NO. _____

REFERENCE PERMIT NO. _____

DATE _____

1a. NAME OF OWNER:		2a. NAME OF OPERATOR:	
PROCESS & INDUSTRIAL FABRICATION COMPANY		PROCESS & INDUSTRIAL FABRICATION COMPANY	
1b. STREET ADDRESS OF OWNER:		2b. STREET ADDRESS OF OPERATOR:	
6100 SW WASHINGTON STREET		6100 SW WASHINGTON STREET	
1c. CITY OF OWNER:		2c. CITY OF OPERATOR:	
BARTONVILLE		BARTONVILLE	
1d. STATE OF OWNER: ILLINOIS	1e. ZIP CODE: 61607	2d. STATE OF OPERATOR: ILLINOIS	2e. ZIP CODE: 61607

3a. NAME OF CORPORATE DIVISION OR PLANT:		3b. STREET ADDRESS OF EMISSION SOURCE:		
RITE WAY		6201 SOUTH EAST AVENUE		
3c. CITY OF EMISSION SOURCE: HODGKINS	3d. LOCATED WITHIN CITY LIMITS: ☐ YES ☐ NO	3e. TOWNSHIP:	3f. COUNTY: COOK	3g. ZIP CODE:

4. ALL CORRESPONDENCE TO: (NAME OF INDIVIDUAL)	5. TELEPHONE NUMBER FOR AGENCY TO CALL:
C. J. BRAGG	(312) 748-7200
6. ADDRESS FOR CORRESPONDENCE: (CHECK ONLY ONE) ☐ OWNER ☒ OPERATOR ☐ EMISSION SOURCE	7. YOUR ID NUMBER FOR THIS APPLICATION:(C)

(A) THIS FORM IS TO BE COMPLETED FOR ANY STATIONARY EMISSION SOURCE THAT WILL RESULT IN THE PRODUCTION OF WASTE MATERIAL THAT MAY BE DISPOSED OF IN A MANNER THAT MAY CAUSE OR TEND TO CAUSE POLLUTION IN ILLINOIS EITHER ALONE OR IN COMBINATION WITH MATTER FROM OTHER SOURCES OR SO AS TO VIOLATE REGULATIONS OR STANDARDS ADOPTED BY THE POLLUTION CONTROL BOARD UNDER THE ENVIRONMENTAL PROTECTION ACT.

(B) ENTER INFORMATION HERE FROM COMPARABLE BLOCK ON APC-200 - "APPLICATION FOR A PERMIT".

(C) ENTER INFORMATION IN ITEM 7 ABOVE SAME AS ITEM 7 APC-200 - "APPLICATION FOR A PERMIT".

(D) IF ADDITIONAL SPACE IS REQUIRED USE ADDITIONAL SHEETS, ATTACH AND IDENTIFY INFORMATION BY APPROPRIATE BLOCK NUMBER AS IT APPEARS ON THIS FORM.

THIS ADDENDUM WILL BE REVIEWED BY THE DIVISION OF LAND POLLUTION CONTROL AND THE OWNER WILL BE NOTIFIED WHETHER OR NOT A DETAILED APPLICATION FOR A PERMIT WILL NEED TO BE SUBMITTED. THIS FORM APC-103 - "DISPOSITION OF SOLID WASTE") IN ITSELF SHALL NOT BE CONSIDERED TO BE AN APPLICATION FOR A PERMIT. PROPER APPLICATION FOR PERMIT FORMS WILL BE MAILED TO YOU BY THE DIVISION OF LAND POLLUTION CONTROL, IF IT IS DEEMED THAT THE FACILITY REQUIRES A PERMIT.

8. BRIEFLY DESCRIBE THE PROCESS WHICH WILL RESULT IN THE PRODUCTION OF WASTE MATERIAL:

The general operation is for the destructive distillation of film chips into a producer gas (CO & hydrogen) and a char by processing in a destructive distillation unit at ca 1400°F in the absence of air.

9. DESCRIBE THE STATE OF THE WASTE MATERIAL (SLURRY, CAKE, FINE ASH, CINDERS, POWDER, SLUDGE, WATER SUSPENDED, ETC.) AT THE APPLICANT'S PROPOSED DISPOSAL SITE:

The char produced varies from cinders to powder (98% retained on 40 mesh screen)

10. FOR THE WASTE STATE THE CHEMICAL COMPOSITION, EXPRESSED AS WEIGHT PERCENTAGES OF SOLID WASTE OR IN MILLIGRAMS PER LITER FOR LIQUIDS:

95% carbon
5% hydrogen
<5 ppm cyanide

10a. STATE VOLUME & WEIGHT OF THE WASTE GENERATED BY THIS OPERATION:
DAILY 86,400#/DAY WEEKLY 604,800#/W MONTHLY N/A /MO. YEARLY N/A /YR OTHER _____ EXPLAIN

11a. WILL THE WASTE MATERIAL BE DEPOSITED IN A SANITARY LANDFILL PERMITTED BY THE ENVIRONMENTAL PROTECTION AGENCY?

[X] YES [ ] NO

11b. IF THE ANSWER TO 1a IS "YES", STATE THE NAME AND AGENCY SUPPLEMENTAL PERMIT NUMBER OF SUCH SITE.

NAME Unknown at present SUPPLEMENTAL PERMIT NO. _____

12a. WILL THE WASTE MATERIAL BE STORED OR PROCESS AT THE APPLICANT PLANT OR PREMISES? [ ] YES [X] NO

12b. IF THE ANSWER TO 12a IS "YES", EXPLAIN.

13a. WILL THE WASTE MATERIAL BE TRANSPORTED TO A REMOTE SITE FOR STORAGE, PROCESSING, OR DISPOSAL? [X] YES [ ] NO

13b. IF THE ANSWER TO 13a IS "YES", EXPLAIN.

The char will be transported to a land fill for disposal or the material will be sold to a asphalt plant for incorporation in road surfacing material.

14a. WILL THE WASTE MATERIAL BE INCINERATED? [ ] YES [X] NO

14b. IF THE ANSWER TO 14a IS "YES", EXPLAIN.

15a. IF THE WASTE WILL BE DISPOSED OR UTILIZED IN A MANNER NOT OTHERWISE DESCRIBED, STATE THE METHOD OF UTILIZATION OR DISPOSAL TO BE USED AND THE OWNER AND LOCATION OF THE DISPOSAL OR PROCESSING FACILITY AND EXPLAIN.

N/A

STATE OF ILLINOIS
ENVIRONMENTAL PROTECTION AGENCY
DIVISION OF AIR POLLUTION CONTROL
2200 CHURCHILL ROAD
SPRINGFIELD, ILLINOIS 62706

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*DATA AND INFORMATION

FUEL COMBUSTION EMISSION SOURCE

*THIS INFORMATION FORM IS TO BE COMPLETED FOR A FURNACE, BOILER, OR SIMILAR EQUIPMENT USED FOR THE PRIMARY PURPOSE OF PRODUCING HEAT OR POWER BY INDIRECT HEAT TRANSFER. AN EMISSION SOURCE THAT DOES NOT FIT THIS DESCRIPTION, INCLUDING AN EMISSION SOURCE USING DIRECT HEATING, IS EITHER A PROCESS EMISSION SOURCE OR AN INCINERATOR.

1. NAME OF OWNER: RITE WAY	2. NAME OF CORPORATE DIVISION OR PLANT (IF DIFFERENT FROM OWNER):
3. STREET ADDRESS OF EMISSION SOURCE: 6201 SOUTH EAST AVENUE	4. CITY OF EMISSION SOURCE: HODGKINS, IL.

GENERAL INFORMATION

5. FLOW DIAGRAM DESIGNATION(S) OF EMISSION SOURCE: YES - ATTACHMENT WITH FORM 220

6. MANUFACTURER: PROCESS & INDUSTRIAL FABRICATION COMPANY	7. MODEL NUMBER: PIFCO TAG #1	8. SERIAL NUMBER:

9. AVERAGE OPERATING TIME OF EMISSION SOURCE: N/A HRS/DAY ____ DAYS/WK ____ WKS/YR	10. MAXIMUM OPERATING TIME OF EMISSION SOURCE: 24 HRS/DAY 7 DAYS/WK VARIOUS/YR

11. PERCENT OF ANNUAL HEAT INPUT:
N/A DEC-FEB ____ % MAR-MAY ____ % JUN-AUG ____ % SEP-NOV ____ %

INSTRUCTIONS

1. COMPLETE THE ABOVE IDENTIFICATION AND GENERAL INFORMATION SECTION.
2. COMPLETE THE APPROPRIATE FUEL SECTION OR SECTIONS. IF MORE THAN ONE FUEL IS FIRED OR IF THE CAPABILITY EXISTS TO FIRE MORE THAN ONE FUEL, THE ACTUAL USAGE OF FUELS AND THE RELATIONSHIP BETWEEN FUELS, SIMULTANEOUS FIRING, ALTERNATE FIRING, RESERVE FUEL, ETC., MUST BE MADE CLEAR.
3. EMISSION AND EXHAUST POINT INFORMATION MUST BE COMPLETED, UNLESS EMISSIONS ARE EXHAUSTED THROUGH AIR POLLUTION CONTROL EQUIPMENT.
4. FIRING RATES AND CERTAIN OTHER ITEMS REQUIRE BOTH AVERAGE AND MAXIMUM VALUES.
5. FOR GENERAL INFORMATION REFER TO "GENERAL INSTRUCTIONS FOR PERMIT APPLICATIONS," APC-201.

DEFINITIONS

AVERAGE - THE VALUE THAT SUMMARIZES OR REPRESENTS THE GENERAL CONDITION OF THE EMISSION SOURCE, OR THE GENERAL STATE OF HEAT PRODUCTION OF THE EMISSION SOURCE. SPECIFICALLY:
AVERAGE OPERATING TIME - ACTUAL TOTAL HOURS OF OPERATION FOR THE PRECEDING TWELVE MONTH PERIOD.
AVERAGE RATE - ACTUAL TOTAL QUANTITY OF "MATERIAL" FOR THE PRECEDING TWELVE MONTH PERIOD, DIVIDED BY THE AVERAGE OPERATING TIME.
AVERAGE OPERATION - OPERATION TYPICAL OF THE PRECEDING TWELVE MONTH PERIOD, AS REPRESENTED BY AVERAGE OPERATING TIME AND AVERAGE RATES.

MAXIMUM - THE GREATEST VALUE ATTAINABLE OR ATTAINED FROM THE EMISSION SOURCE, OR THE PERIOD OF GREATEST OR UTMOST HEAT PRODUCTION OF THE EMISSION SOURCE. SPECIFICALLY:
MAXIMUM OPERATING TIME - GREATEST EXPECTED TOTAL HOURS OF OPERATION FOR ANY TWELVE MONTH PERIOD.
MAXIMUM RATE - GREATEST QUANTITY OF "MATERIAL" EXPECTED PER ANY ONE HOUR OF OPERATION.
MAXIMUM OPERATION - GREATEST EXPECTED OPERATION, AS REPRESENTED BY MAXIMUM OPERATING TIME AND MAXIMUM RATES.

GAS FIRING

*11. ORIGIN OF GAS: ☐ PIPELINE ☐ DISTILLATE FUEL OIL GASIFICATION ☐ OTHER LIQUID FUEL GASIFICATION ☐ SOLID FUEL GASIFICATION ☒ BYPRODUCT: SPECIFY SOURCE producer gas from destructive disti

12. ARE YOU ON AN INTERRUPTABLE GAS SUPPLY: ☐ YES ☒ NO
IF "YES", SPECIFY ALTERNATE FUEL: _____

13. ANNUAL CONSUMPTION:	* 14. HEAT CONTENT:	* 15. SULFUR CONTENT:
N/A SCF	554 BTU/SCF	NIL %BY WT.

16. AVERAGE FIRING RATE:	17. MAXIMUM FIRING RATE:
28.6 MM BTU/HR.	BTU/HR

*IF THE GAS FIRED IS NATURAL GAS, THESE ITEMS NEED NOT BE COMPLETED.

OIL FIRING

18. TYPE OF OIL:
GRADE NUMBER: ☐ 1 ☐ 2 ☐ 4 ☐ 5 ☐ 6 OTHER: SPECIFY _____

19. ANNUAL CONSUMPTION:	20. HEAT CONTENT:
GALLONS	☐ BTU/LB ☐ BTU/GAL

21. SULFUR CONTENT:	22. ASH CONTENT:
%BY WT	%BY WT

23. DIRECTION OF FIRING:
☐ HORIZONTAL ☐ TANGENTIAL ☐ OTHER: SPECIFY _____

24. AVERAGE FIRING RATE:	25. MAXIMUM FIRING RATE:
BTU/HR	BTU/HR

SOLID FUEL FIRING

26. TYPE OF SOLID FUEL:
☐ SUB-BITUMINOUS COAL ☐ BITUMINOUS COAL ☐ ANTHRACITE COAL ☐ OTHER: SPECIFY

27. ANNUAL CONSUMPTION:	28. HEAT CONTENT AS FIRED:
TONS	BTU/LB

29. MOISTURE CONTENT AS FIRED:	30. ASH CONTENT AS FIRED:	31. SULFUR CONTENT AS FIRED:
%BY WT	%BY WT	%BY WT

32. TYPE OF FIRING:
☐ CYCLONE ☐ PULVERIZED { ☐ WET BOTTOM OR ☐ DRY BOTTOM, ☐ HORIZONTALLY OPPOSED OR ☐ OTHER: SPECIFY _____
☐ SPREADER STOKER: % REINJECTION _____ ☐ OTHER: SPECIFY _____

33. AVERAGE FIRING RATE:	34. MAXIMUM FIRING RATE:
BTU/HR	BTU/HR

SUBMIT COPIES OF THOSE PORTIONS OF COAL OR OTHER SOLID FUEL CONTRACTS WHICH SET FORTH THE SPECIFICATIONS OF THE FUEL AND THE DURATION OF THE CONTRACT. IF THE ACTUAL FUEL FIRED IS A BLEND OF SOLID FUELS, SUBMIT APPROPRIATE PORTIONS OF ALL FUEL CONTRACTS AND SET FORTH THE MANNER IN WHICH THE FUELS ARE BLENDED AND ACTUALLY FIRED. REFERENCE THIS INFORMATION TO THIS FORM.

*EMISSION INFORMATION

35. NUMBER OF IDENTICAL SOURCES (DESCRIBE AS REQUIRED):
N/A

AVERAGE OPERATION

CONTAMINANT	CONCENTRATION OR EMISSION RATE PER IDENTICAL SOURCE			METHOD USED TO DETERMINE CONCENTRATION OR EMISSION RATE
PARTICULATE MATTER	36a.	GR/SCF	b. ☐ LB/10^6 BTU ☐ LB/HR	c.
CARBON MONOXIDE	37a.	PPM (VOL)	b. ☐ LB/10^6 BTU ☐ LB/HR	c.
NITROGEN OXIDES	38a.	PPM (VOL)	b. ☐ LB/10^6 BTU ☐ LB/HR	c.
ORGANIC MATERIAL	39a.	PPM (VOL)	b. ☐ LB/10^6 BTU ☐ LB/HR	c.
SULFUR DIOXIDE	40a.	PPM (VOL)	b. ☐ LB/10^6 BTU ☐ LB/HR	c.

MAXIMUM OPERATION

CONTAMINANT	CONCENTRATION OR EMISSION RATE PER IDENTICAL SOURCE			METHOD USED TO DETERMINE CONCENTRATION OR EMISSION RATE
PARTICULATE MATTER	41a. .0517	GR/SCF	b. 0.4195 ☐ LB/10^6 BTU ☐ LB/HR	c.
CARBON MONOXIDE	42a. 50	PPM (VOL)	b. ☐ LB/10^6 BTU ☐ LB/HR	c. CALIFORNIA RULE 71
NITROGEN OXIDES	43a. 210	PPM (VOL)	b. ☐ LB/10^6 BTU ☐ LB/HR	c. AS NO 2 CHEMLUMINESCENCE
ORGANIC MATERIAL	44a. NIL	PPM (VOL)	b. ☐ LB/10^6 BTU ☐ LB/HR	c.
SULFUR DIOXIDE	45a. NIL	PPM (VOL)	b. ☐ LB/10^6 BTU ☐ LB/HR	c.

*IF EMISSIONS ARE EXHAUSTED THROUGH AIR POLLUTION CONTROL EQUIPMENT, OR IF NATURAL GAS IS THE FUEL FIRED, ITEMS 36 THROUGH 47 NEED NOT BE COMPLETED.

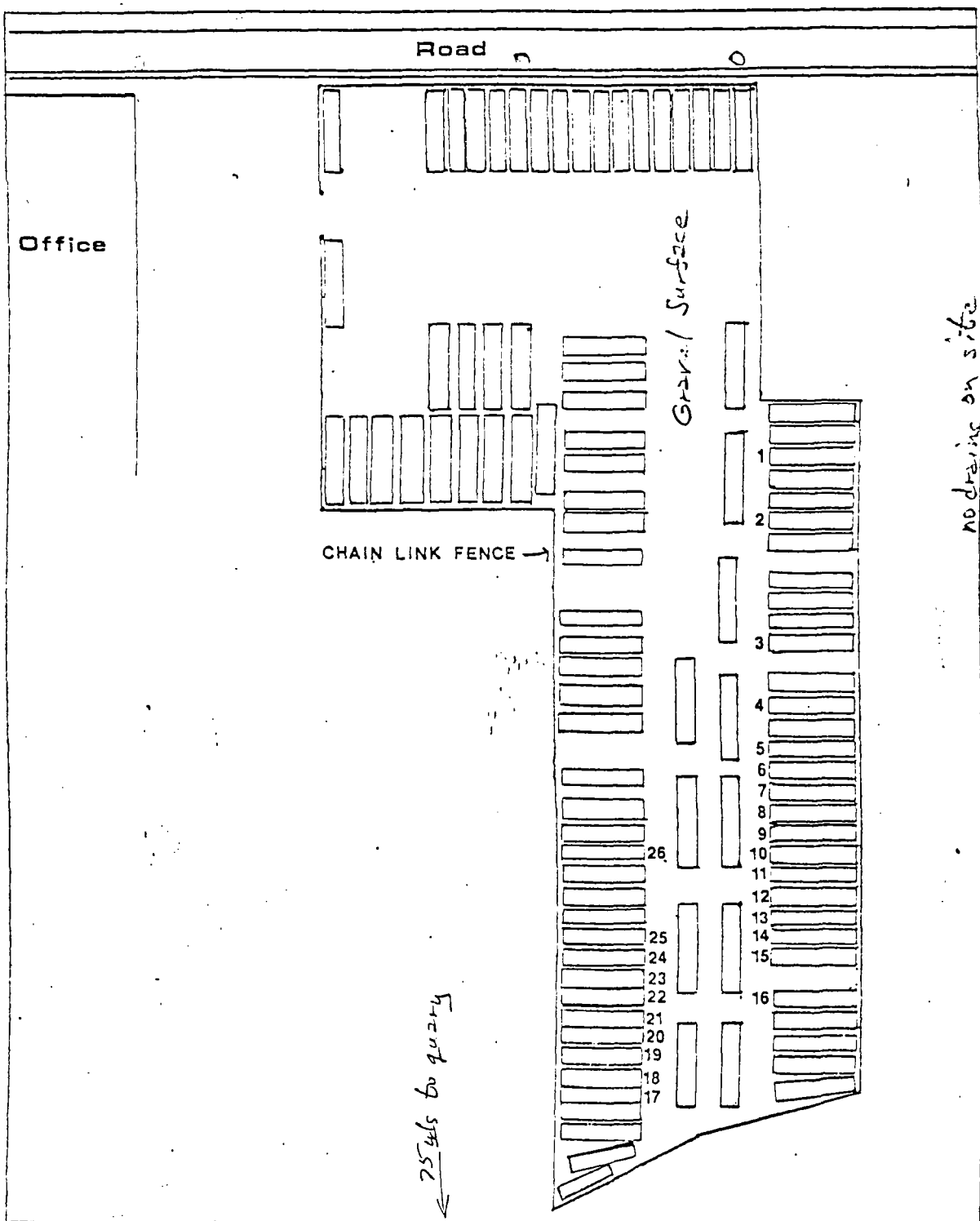
**EXHAUST POINT INFORMATION

46. FLOW DIAGRAM DESIGNATION(S) OF EXHAUST POINT:

47. DESCRIPTION OF EXHAUST POINT (LOCATION IN RELATION TO BUILDINGS, DIRECTION, HOODING, ETC.):

48. EXIT HEIGHT ABOVE GRADE:	50. EXIT DIAMETER:
49. GREATEST HEIGHT OF NEARBY BUILDINGS: FT	51. EXIT DISTANCE FROM NEAREST PLANT BOUNDARY: FT
AVERAGE OPERATION	MAXIMUM OPERATION
52. EXIT GAS TEMPERATURE: °F	54. EXIT GAS TEMPERATURE: °F
53. GAS FLOW RATE THROUGH EACH EXIT: ACFM	55. GAS FLOW RATE THROUGH EACH EXIT: ACFM

**IF EMISSIONS ARE EXHAUSTED THROUGH AIR POLLUTION CONTROL EQUIPMENT THIS SECTION SHOULD NOT BE COMPLETED.



GEMINI LEASING (RITE-WAY) Figure 4

6201 SOUTH EAST AVE.
HODGKINS, IL.

APPROXIMATE SCALE:

FEET

0 50 100

N

ROY F. WESTON, INC.
WESTON
ENVIRONMENTAL CONSULTANTS-DESIGNERS

Per site visit of 17 Oct 1983

JAE 19 October 1983

STATE OF ILLINOIS
ENVIRONMENTAL PROTECTION AGENCY
DIVISION OF AIR POLLUTION CONTROL
2200 CHURCHILL ROAD
SPRINGFIELD, ILLINOIS 62706
TELEPHONE (217) 782-5812

RECEIVED
AUG 24 1984
IEPA-DLPC

AIR POLLUTION EPISODE ACTION PLAN

NAME OF FACILITY	DATE:
RITE WAY	8/23/84

LOCATION OF FACILITY – STREET:	CITY OR TOWNSHIP:	COUNTY:
6201 SOUTH EAST AVENUE	HODGKINS	COOK

MAILING ADDRESS – STREET OR BOX NO.:	CITY:	STATE AND ZIP:

	PERSON TO BE NOTIFIED DURING EPISODE:	TITLE:	OFFICE PHONE:	HOME PHONE:
1.	C. J. BRAGG	PRESIDENT	(312) 748-7200	(312) 735-8261
2.	J. LARUE	VICE PRESIDENT	(307) 697-9518	(307) 694-6688
3	L. AMBROSE	PROJECT MANAGER	(312) 825-3197	(312) 825-3197

FACILITY OPERATIONS: Describe operations or products manufactured.
Destructive distillation of cyanide contaminated film chips.

DESCRIPTION OF OPERATIONS AND/OR EMISSION SOURCES FOR WHICH AN ACTION PLAN IS REQUIRED:

The general operation is for the destructive distillation of film chips by heating to ca 1400°F in the absence of air, decomposing the cyanide radical and the film base to gaseous products which are then burned in a "flare stack" (incinerated).

The source of emissions is the flare stack which will be monitored for CO continuously for excess air control and for particulate matter by stack analysis.

The second source to be monitored is the char produced as an end-product of the film base. This will be monitored for cyanide on a composite daily sample.

This Agency is authorized to require this information under Illinois Revised Statutes, 1979, Chapter 111 1 2, Section 1010 Disclosure of this information is required. Failure to do so may result in a civil penalty up to $10,000.00 and an additional civil penalty up to $1,000.00 for each day the failure continues, a fine up to $1,000 00 and imprisonment up to one year. This form has been approved by the Forms Management Center.

REMARKS:

PERSON TO BE CONTACTED FOR FURTHER INFORMATION REGARDING THIS PLAN: C. J. BRAGG (Name) (312) 748-7200 (Phone)

SIGNATURE: The undersigned hereby submits its episode action plan in accordance with Rule 404 Chapter 2, Part IV. Illinois Pollution Control Regulations amended April 19, 1976 and certifies that the statements contained herein are true and correct This plan indicates emission reduction actions which will be taken in the event of an air pollution episode

OWNER OF FACILITY

Name (printed) _____

Signature _____

Title _____

OPERATOR OF FACILITY (If other than owner)

Name (printed) _____

Signature _____

Title _____

NAME OF FACILITY

EPISODE ACTION PROGRAM

THE ACTIONS LISTED BELOW WILL BE TAKEN WHENEVER EPISODE STAGES AND POLLUTANTS OCCUR IN THE COMBINATIONS INDICATED. (DURING PRODUCT EPISODES BOTH S AND P ACTIONS WILL BE TAKEN.)

STAGE	POLLUTANTS	ACTIONS REQUIRED OF ALL FACILITIES
YRE	O	NO REFUSE BURNING CONDUCTED.
Y	CNP	NO REFUSE BURNING CONDUCTED OTHER THAN IN INCINERATORS MEETING ILLINOIS EMISSION STANDARDS (FOR APPLICABLE POLLUTANT) AND DURING HOURS OF NOON TO 4 PM (OR OTHER HOURS AS ANNOUNCED BY ILLINOIS EPA).
RE	O	NO BUILDINGS HEATED TO MORE THAN 65°F OR AIR CONDITIONED TO LESS THAN 80°F. (EXCEPT AS AUTHORIZED BY EPISODE REGULATIONS.) NO FLEET VEHICLES DISPATCHED AFTER DECLARATION OF ALERT AND NONE OPERATED ON SECOND AND SUBSEQUENT DAYS OF ALERT. (EXCEPT AS AUTHORIZED BY EPISODE REGULATIONS.) NO ELECTRICITY USED FOR DECORATIVE OR ADVERTISING PURPOSES. NO GASOLINE OR OTHER VOLATILE ORGANIC MATERIAL IN EXCESS OF 250 GALLONS LOADED OR RECEIVED.
RE	CNP	NO REFUSE BURNING CONDUCTED.
E	NSP	NO BUILDINGS HEATED TO MORE THAN 65°F. (EXCEPT AS AUTHORIZED BY EPISODE REGULATIONS.) NO ELECTRICITY USED UNNECESSARILY SUCH AS FOR DECORATIVE, AMUSEMENT OR ADVERTISING PURPOSES.
E	OCNSP	NO MOTOR VEHICLES OPERATED OR MANUFACTURING CONDUCTED. (EXCEPT AS AUTHORIZED BY EPISODE REGULATIONS.) NO FACILITY OR ACTIVITY LISTED IN EMERGENCY SECTION OF EPISODE REGULATIONS OPERATED.

STAGE	POLLUTANTS	DETAILED DESCRIPTION OF ADDITIONAL ACTIONS REQUIRED OF THIS FACILITY
YRE	CP	Check calibration of monitor for true level of CO, if in good working order, then adjust the excess air level of the flare stack. Secondly, check feed rate to unit; if high back-off, if temperature in the destructive distillation zone is too high, back-off to set point or re-establish lower set point of operation. Third operation, check for the feed rate of the film chips to the destructive distillation unit. If high, establish set point rate. If level is too high, back-off and establish new feed level.
E	CP	Go to 50% of set point feed rate to maintain unit operation and re-establish design parameters and slowly bring unit back to set point feed rate in steps to maintain <500 ppm CO.

ABBREVIATIONS USED: EPISODE STAGES Y = YELLOW ALERT, R = RED ALERT, E = EMERGENCY
POLLUTANTS O = OZONE, C = CA... = NITROGEN DIOXIDE, S = SULFUR DIOXIDE, P = PARTICU...

Process & Industrial Fabrication Company
6100 S.W. Washington Street
Bartonville, Illinois 61607

Re: APC-206
Preliminary Inquiry for an Air Pollution Permit

Subject: Description of PIFCO's Destructive Distillation Unit for Degradation of the Cyanide Tainted Film Chips

---

Attached is a schematic of the proposed system PIFCO is offering for the destruction of the cyanide tainted film chips. The peripheral feed equipment for the transport of the chips to the feed hopper consists of a Hi-Vac Air Transport System with a Ultra Fine Filtration System for the exit air, having an approximate one (1) micron absolute removal rating.

This equipment is depicted by the Chip-Scoop vacuum unit, the feed hopper and top-mounted filter system to clean up the air prior to incinerating any possible cyanide vapor picked-up by the transport air.

The feed hopper has high and low level controls which activate the vacuum system when the feed hopper is low and shuts off when the hopper is full. Chips are gravity fed to the feed ram cavity and the ram is time activated (strokes per minute) to control the feed rate to the high temperature conversion section to under-go destructive distillation.

For start-up purposes the conversion section is heated to approximately 900°F using LPG. Feed is introduced to the unit via the feed ram and the material starts to decompose producing a solid char and a producer gas (CO and hydrogen). The latter is fed to the conversion unit to bring the unit to operating temperature, at which time the LPG is backed-out and fed only to the flare stack pilot gas ring.

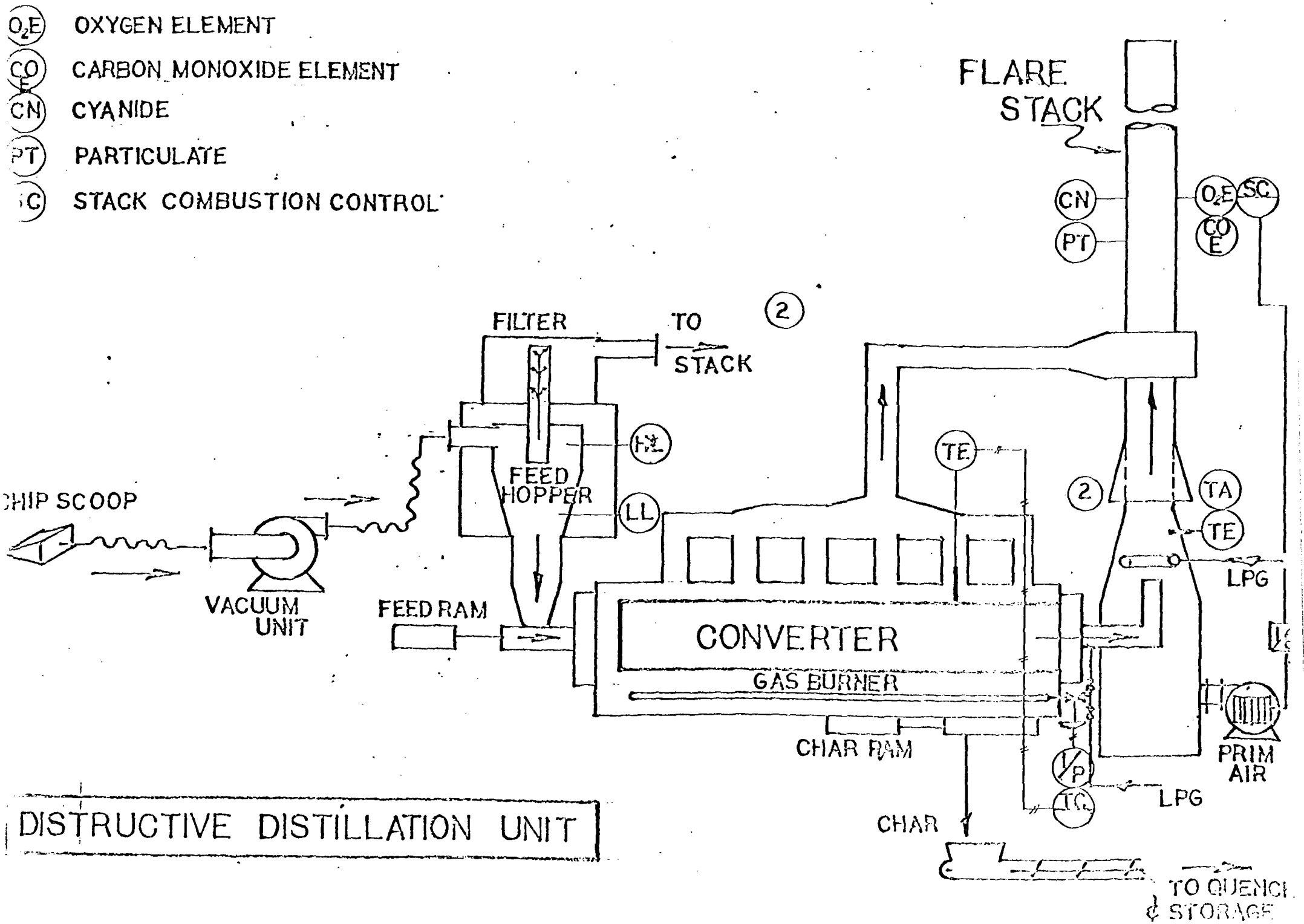
As the temperature is raised to the operating set point, the feed rate to the unit is increased to the pre-determined level. The producer gas produced from the decomposition of the film base as stated previously, is back fed to the converter to maintain the temperature set point. This normally takes approximately 15 to 25% of the total gas produced. The remainder of the gas is fed to the flare stack for total combustion.

The cyanide, if not decomposed in the conversion section, will be converted to carbon dioxide and nitrogen. The kinetic combustion constant for the C-N bond is 10 to the 12th power and at this high rate constant, the C-N bond will only exit in a flame front for several micro seconds at most. In a separate section of this proposal packet is a discussion of the experimental data using a sample of actual chips to confirm the basic design hypothesis. Film chips have been processed in a similar unit and experimental data was developed using the actual chips to confirm the calculated cyanide levels in the effluent streams.

The producer gas is introduced to the flare stack for final combustion. The flare stack is to be monitored and controlled for CO and oxygen, combustion control loop. The stack is also monitored for cyanide with manual feed back (corrective action if too high) and for particulate levels with manual feed back.

Char is removed from the unit via the char hydraulic ram located on the bottom side forward end of the conversion section. The char drops into a conveyor to a storage area where the material is impounded until a cyanide analysis has been completed on the composite sample. The char batch is released for disposal if the cyanide level is 5 ppm or less. Any off-spec char can be recycled to the conversion section for additional thermal processing.

For any additional information or clarification of any item or area, please contact Mr. C. J. Bragg at the above location; telephone number (307) 697-9518 or (312) 748-7200.


O_2E OXYGEN ELEMENT
CO E CARBON MONOXIDE ELEMENT
CN CYANIDE
PT PARTICULATE
C STACK COMBUSTION CONTROL
FLARE STACK
CN
PT
O_2E
CO E
SC
FILTER
TO STACK
2
HL
LL
FEED HOPPER
TE
TA
TE
LPG
CHIP SCOOP
VACUUM UNIT
FEED RAM
CONVERTER
GAS BURNER
CHAR RAM
I/P
TC
LPG
PRIM AIR
CHAR
TO QUENCH & STORAGE
DISTRUCTIVE DISTILLATION UNIT

STATE OF ILLINOIS
ENVIRONMENTAL PROTECTION AGENCY
DIVISION OF AIR POLLUTION CONTROL
2200 CHURCHILL ROAD
SPRINGFIELD, ILLINOIS 62706

This Agency is authorized to require this information under Illinois Revised Statutes, 1979, Chapter 111 1/2, Section 1039. Disclosure of this information is required under that Section. Failure to do so may prevent this form from being processed and could result in your application being denied. This form has been approved by the Forms Management Center.

*DATA AND INFORMATION PROCESS EMISSION SOURCE	

*THIS INFORMATION FORM IS TO BE COMPLETED FOR AN EMISSION SOURCE OTHER THAN A FUEL COMBUSTION EMISSION SOURCE OR AN INCINERATOR. A FUEL COMBUSTION EMISSION SOURCE IS A FURNACE, BOILER, OR SIMILAR EQUIPMENT USED PRIMARILY FOR PRODUCING HEAT OR POWER BY INDIRECT HEAT TRANSFER. AN INCINERATOR IS AN APPARATUS IN WHICH REFUSE IS BURNED.

1. NAME OF PLANT OWNER: RITE WAY	2. NAME OF CORPORATE DIVISION OR PLANT (IF DIFFERENT FROM OWNER):
3. STREET ADDRESS OF EMISSION SOURCE: 6201 SOUTH EAST AVENUE	4. CITY OF EMISSION SOURCE: HODGKINS, IL.

GENERAL INFORMATION

5. NAME OF PROCESS: DESTRUCTIVE DISTILLATION UNIT	6. NAME OF EMISSION SOURCE EQUIPMENT: FLARE STACK (PORTABLE)	
7. EMISSION SOURCE EQUIPMENT MANUFACTURER: PROCESS & INDUSTRIAL FABRICATION COMPANY	8. MODEL NUMBER: PIFCO TAG #1	9. SERIAL NUMBER:

10. FLOW DIAGRAM DESIGNATION(S) OF EMISSION SOURCE:
YES - ATTACHED

11. IDENTITY(S) OF ANY SIMILAR SOURCE(S) AT THE PLANT OR PREMISES NOT COVERED BY THE FORM (IF THE SOURCE IS COVERED BY ANOTHER APPLICATION, IDENTIFY THE APPLICATION):
N/A

12. AVERAGE OPERATING TIME OF EMISSION SOURCE:	13. MAXIMUM OPERATING TIME OF EMISSION SOURCE:
N/A HRS/DAY ____ DAYS/WK ____ WKS/YR	24 HRS/DAY 7 DAYS/WK VARIABLE YR

14. PERCENT OF ANNUAL THROUGHPUT:
N/A DEC-FEB ____ % MAR-MAY ____ % JUN-AUG ____ % SEPT-NOV ____ %

INSTRUCTIONS

1. COMPLETE THE ABOVE IDENTIFICATION AND GENERAL INFORMATION SECTION.
2. COMPLETE THE RAW MATERIAL, PRODUCT, WASTE MATERIAL, AND FUEL USAGE SECTIONS FOR THE PARTICULAR SOURCE EQUIPMENT. COMPOSITIONS OF MATERIALS MUST BE SUFFICIENTLY DETAILED TO ALLOW DETERMINATION OF THE NATURE AND QUANTITY OF POTENTIAL EMISSIONS. IN PARTICULAR, THE COMPOSITION OF PAINTS, INKS, ETC., AND ANY SOLVENTS MUST BE FULLY DETAILED.
3. EMISSION AND EXHAUST POINT INFORMATION MUST BE COMPLETED, UNLESS EMISSIONS ARE EXHAUSTED THROUGH AIR POLLUTION CONTROL EQUIPMENT.
4. OPERATING TIME AND CERTAIN OTHER ITEMS REQUIRE BOTH AVERAGE AND MAXIMUM VALUES.
5. FOR GENERAL INFORMATION REFER TO "GENERAL INSTRUCTIONS FOR PERMIT APPLICATIONS," APC-201.

DEFINITIONS

AVERAGE - THE VALUE THAT SUMMARIZES OR REPRESENTS THE GENERAL CONDITION OF THE EMISSION SOURCE, OR THE GENERAL STATE OF PRODUCTION OF THE EMISSION SOURCE. SPECIFICALLY:
AVERAGE OPERATING TIME - ACTUAL TOTAL HOURS OF OPERATION FOR THE PRECEDING TWELVE MONTH PERIOD.
AVERAGE RATE - ACTUAL TOTAL QUANTITY OF "MATERIAL" FOR THE PRECEDING TWELVE MONTH PERIOD, DIVIDED BY THE AVERAGE OPERATING TIME.
AVERAGE OPERATION - OPERATION TYPICAL OF THE PRECEDING TWELVE MONTH PERIOD, AS REPRESENTED BY AVERAGE OPERATING TIME AND AVERAGE RATES.

MAXIMUM - THE GREATEST VALUE ATTAINABLE OR ATTAINED FROM THE EMISSION SOURCE, OR THE PERIOD OF GREATEST OR UTMOST PRODUCTION OF THE EMISSION SOURCE. SPECIFICALLY:
MAXIMUM OPERATING TIME - GREATEST EXPECTED TOTAL HOURS OF OPERATIONS FOR ANY TWELVE MONTH PERIOD.
MAXIMUM RATE - GREATEST QUANTITY OF "MATERIAL" EXPECTED PER ANY ONE HOUR OF OPERATION.
MAXIMUM OPERATION - GREATEST EXPECTED OPERATION, AS REPRESENTED BY MAXIMUM OPERATING TIME AND MAXIMUM RATES.

RAW MATERIAL INFORMATION

NAME OF RAW MATERIAL	AVERAGE RATE PER IDENTICAL SOURCE	MAXIMUM RATE PER IDENTICAL SOURCE
20a. FILM CHIPS	b. 3600 LB/HR	c. 3600 LB/HR
21a.	b. LB/HR	c. LB/HR
22a.	b. LB/HR	c. LB/HR
23a.	b. LB/HR	c. LB/HR
24a.	b. LB/HR	c. LB/HR

PRODUCT INFORMATION

NAME OF PRODUCT	AVERAGE RATE PER IDENTICAL SOURCE	MAXIMUM RATE PER IDENTICAL SOURCE
30a. PRODUCER GAS	b. 976 SCFM LB/HR	c. LB/HR
31a.	b. LB/HR	c. LB/HR
32a.	b. LB/HR	c. LB/HR
33a.	b. LB/HR	c. LB/HR
34a.	b. LB/HR	c. LB/HR

WASTE MATERIAL INFORMATION

NAME OF WASTE MATERIAL	AVERAGE RATE PER IDENTICAL SOURCE	MAXIMUM RATE PER IDENTICAL SOURCE
40a. CARBON CHAR	b. 360 LB/HR	c. LB/HR
41a.	b. LB/HR	c. LB/HR
42a.	b. LB/HR	c. LB/HR
43a.	b. LB/HR	c. LB/HR
44a.	b. LB/HR	c. LB/HR

*FUEL USAGE INFORMATION

FUEL USED	TYPE	HEAT CONTENT
50a. NATURAL GAS ☐	b.	c. 1000 BTU/SCF
OTHER GAS ☒	PRODUCER GAS	554 BTU/SCF
OIL ☐		BTU/GAL
COAL ☐		BTU/LB
OTHER ☒	PROPANE (START-UP)	2358 BTU/LB

d. AVERAGE FIRING RATE PER IDENTICAL SOURCE: from product producer gas 135,000 BTU/HR

e. MAXIMUM FIRING RATE PER IDENTICAL SOURCE: N/A BTU/HR

*THIS SECTION IS TO BE COMPLETED FOR ANY FUEL USED DIRECTLY IN THE PROCESS EMISSION SOURCE, E.G. GAS IN A DRYER, OR COAL IN A MELT FURNACE.

*EMISSION INFORMATION

51. NUMBER OF IDENTICAL SOURCES (DESCRIBE AS REQUIRED):
N/A

AVERAGE OPERATION

CONTAMINANT	CONCENTRATION OR EMISSION RATE PER IDENTICAL SOURCE		METHOD USED TO DETERMINE CONCENTRATION OR EMISSION RATE
PARTICULATE MATTER	52a. GR/SCF	b. LB/HR	c.
CARBON MONOXIDE	53a. PPM (VOL)	b. LB/HR	c.
NITROGEN OXIDES	54a. PPM (VOL)	b. LB/HR	c.
ORGANIC MATERIAL	55a. PPM (VOL)	b. LB/HR	c.
SULFUR DIOXIDE	56a. PPM (VOL)	b. LB/HR	c.
**OTHER (SPECIFY)	57a. PPM (VOL)	b. LB/HR	c.

MAXIMUM OPERATION

CONTAMINANT	CONCENTRATION OR EMISSION RATE PER IDENTICAL SOURCE		METHOD USED TO DETERMINE CONCENTRATION OR EMISSION RATE
PARTICULATE MATTER	58a. .0517 GR/SCF	b. 0.4195 LB/HR	c.
CARBON MONOXIDE	59a. 50 PPM (VOL)	b. LB/HR	c. CALIFORNIA RULE 71
NITROGEN OXIDES	60a. 210 PPM (VOL)	b. LB/HR	c. AS NO_2 - CHEMILUMINESCENCE
ORGANIC MATERIAL	61a. NIL PPM (VOL)	b. LB/HR	c.
SULFUR DIOXIDE	62a. NIL PPM (VOL)	b. LB/HR	c.
**OTHER (SPECIFY)	63a. PPM (VOL)	b. LB/HR	c.

*ITEMS 52 THROUGH 63 NEED NOT BE COMPLETED IF EMISSIONS ARE EXHAUSTED THROUGH AIR POLLUTION CONTROL EQUIPMENT.
**"OTHER" CONTAMINANT SHOULD BE USED FOR AN AIR CONTAMINANT NOT SPECIFICALLY NAMED ABOVE. POSSIBLE OTHER CONTAMINANTS ARE ASBESTOS, BERYLLIUM, MERCURY, VINYL CHLORIDE, LEAD, ETC.

***EXHAUST POINT INFORMATION

64. FLOW DIAGRAM DESIGNATION(S) OF EXHAUST POINT:

65. DESCRIPTION OF EXHAUST POINT (LOCATION IN RELATION TO BUILDINGS, DIRECTION, HOODING, ETC.):

66. EXIT HEIGHT ABOVE GRADE:	67. EXIT DIAMETER:
68. GREATEST HEIGHT OF NEARBY BUILDINGS: FT	69. EXIT DISTANCE FROM NEAREST PLANT BOUNDARY: FT
AVERAGE OPERATION	MAXIMUM OPERATION
70. EXIT GAS TEMPERATURE: °F	72. EXIT GAS TEMPERATURE: °F
71. GAS FLOW RATE THROUGH EACH EXIT: ACFM	73. GAS FLOW RATE THROUGH EACH EACH EXIT: ACFM

***THIS SECTION SHOULD NOT BE COMPLETED IF EMISSIONS ARE EXHAUSTED THROUGH AIR POLLUTION CONTROL EQUIPMENT.

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STATE OF ILLINOIS
ENVIRONMENTAL PROTECTION AGENCY
DIVISION OF AIR POLLUTION CONTROL
2200 CHURCHILL ROAD
SPRINGFIELD, ILLINOIS 62706

DATA AND INFORMATION INCINERATOR	FOR AGENCY USE ONLY

1. NAME OF OWNER: RITE WAY	2. NAME OF CORPORATE DIVISION OR PLANT (IF DIFFERENT FROM OWNER):
3. STREET ADDRESS OF EMISSION SOURCE: 6201 SOUTH EAST AVENUE	4. CITY OF EMISSION SOURCE: HODGKINS, IL.

GENERAL INFORMATION

5. FLOW DIAGRAM DESIGNATIONS OF INCINERATORS DESCRIBED ON THIS FORM (REFER TO "GENERAL INSTRUCTIONS FOR COMPLETION OF PERMIT APPLICATIONS," FORM APC-201): SEE ATTACHMENT WITH FORM 220

6. DESCRIPTION OF SOURCE OF WASTE: FILM CHIPS		FOR AGENCY USE ONLY DO NOT COMPLETE THIS SECTION
7. MANUFACTURER OF INCINERATOR: PROCESS & INDUSTRIAL FABRICATION COMPANY		MANUFACTURER CODE
8. MODEL NAME AND NUMBER: PIFCO TAG #1	9. ☒ FLUE ☐ SINGLE CHAMBER ☐ MULTIPLE CHAMBER	MODEL CODE
10. MAXIMUM AMOUNT OF WASTE TO BE INCINERATED: 3,240 LB/HR		CAPACITY CODE
11. ESTIMATED DAILY AMOUNT OF WASTE TO BE INCINERATED: 86,400 LB		PARTICULATE EMISSION FACTOR CODE
12. HEIGHT OF STACK ABOVE GRADE: 40 FT		CO EMISSION FACTOR CODE
13. HEIGHT OF TALLEST STRUCTURES WITHIN 150 FEET: VARIOUS FT		
14. PRIMARY BURNER USED? N/A ☐ YES ☐ NO	MAX RATING _____ BTU/HR	PRIMARY BURNER CODE
15. SECONDARY BURNER USED? N/A ☐ YES ☐ NO	MAX RATING _____ BTU/HR	SECONDARY BURNER CODE

DESCRIPTION OF TYPICAL WASTE TO BE INCINERATED

16a. PAPER: _____ % BY WT	b. DRY WOOD: _____ % BY WT	c. LEATHER, LINOLEUM: _____ % BY WT
d. RUBBER AND PLASTICS: _____ % BY WT	e. OILS AND PAINTS: _____ % BY WT	f. STREET AND FLOOR SWEEPINGS: _____ % BY WT
g. FATS AND MEAT DRESSING: _____ % BY WT	h. GLASS AND CERAMICS: _____ % BY WT	i. METALS: _____ % BY WT
j. LEAVES, GRASS, BRANCHES, VEGETABLES & FRUITS: _____ % BY WT	k. OTHER (SPECIFY) producer gas from destructive distillation unit _____ % BY WT	

FOR AGENCY USE ONLY

OPERATIONAL INFORMATION			
17. AVERAGE OPERATION TIME OF INCINERATOR: N/A	____ HRS/DAY	____ DAYS/WEEK	____ WKS/YEAR
17a. MAXIMUM OPERATION TIME OF INCINERATOR:	VARIOUS HRS/DAY	24 DAYS/WEEK	7 WKS/YEAR
18. PERCENT OF ANNUAL THROUGHPUT: BY SITE	DEC/FEB ____ %	MAR/MAY ____ %	JUN/AUG ____ % SEP/NOV ____ %

SPECIAL NOTES
19a. FOR INDUSTRIAL WASTES, COMPLETE COMPONENT AND/OR CHEMICAL DESCRIPTION INCLUDING SULFUR, CHLORIDE, ASH, AND MOISTURE CONTENT, MUST BE GIVEN IN AN EXHIBIT ATTACHED TO THIS APPLICATION. N/A
b. THE AGENCY MUST HAVE ON FILE PROOF THAT THE MAKE AND MODEL INCINERATOR DESCRIBED HEREIN WILL MEET THE REQUIREMENTS OF RULES 203(e) AND 206(b) WHEN BURNING THE WASTE, BOTH TYPE AND RATE, DESCRIBED HEREIN.
c. GAS CLEANING DEVICE? (IF "YES", COMPLETE APC-260, ENTITLED "DATA AND INFORMATION -- AIR POLLUTION CONTROL EQUIPMENT") ☑ YES ☐ NO
d. IF LOCATED IN COOK COUNTY, SUBMIT ADDITIONAL PERMIT APPLICATION PLUS COOK COUNTY CONSTRUCTION PERMIT APPLICATION. N/A
e. COMPLETE APC-103, ENTITLED "DISPOSITION OF WASTE MATERIALS" FOR ASH OR RESIDUE FROM INCINERATOR." FORM 103 COMPLETED AND ATTACHED

b. 0.05 gr/SCF PARTICULATE / <500 ppm CO @ 50% EXCESS AIR
(see attached engineering report)

35-45

CONFIDENTIAL

SAN BERNARDINO COUNTY
AIR POLLUTION CONTROL DISTRICT

172 WEST THIRD STREET • SAN BERNARDINO, CALIFORNIA 92415

Telephone:
(714) 383-1061

January 15, 1975

Mr. George King
Pan American Resources
P. O. Box 481
West Covina, CA 91793

Dear Mr. King:

The results of the source test which were conducted by the Air Pollution Control District source test team at Pan American Resources on November 22, 1974 are as follows:

	RETORT		FURNACE	
Particulates	Measured	Allowed	Measured	Allowed
lbs/hr	0.4185	1.18	0.0441	1.18
Grs/SCF	0.0517	0.20	0.0198	0.20
Carbon Monoxide				
ppm	100	2,000	320	2,000

As the above data show, Pan American Resources meets the requirements of the San Bernardino County Air Pollution Control District Rules and Regulations.

A formal engineering report will be completed and a copy forwarded to you in the near future.

Very truly yours,

DONALD M. THOMAS
Air Pollution Control Officer

By:

ROBERT J. HILOVSKY, P.E.
Senior Engineer

DMT:RJH:mmm

35-45

CONFIDENTIAL

SAN BERNARDINO COUNTY
AIR POLLUTION CONTROL DISTRICT

172 WEST THIRD STREET • SAN BERNARDINO, CALIFORNIA 92415

Telephone
(714) 383-1661

REPORT OF SOURCE TEST

conducted at

PAN AMERICAN RESOURCES
Upland, California

November 22, 1974

REPORT OF PARTICULATE, CO AND NOx EMISSIONS FROM A REGENERATIVE INCINERATOR SYSTEM

Written by:

M. L. Howeth
Jr. Air Pollution Control Engineer

Approved by

DONALD M. THOMAS
Air Pollution Control Offic

REGISTERED PROFESSIONAL ENGINEER
ROBERT L. HRLOVSKY, P.E.
Senior Engineer
Date: Feb. 6, 1975
STATE OF CALIFORNIA

35-45

CONFIDENTIAL

INTRODUCTION

Pan American Resources burns paper and other dry trash in a closed regenerative system. The reduction of the trash in a closed retort produces a gas which is then burned to produce the heat to cause reduction of the incoming trash. Charcoal is produced as a by-product of the process.

OBJECTIVE

The objective was to determine compliance with San Bernardino County APCD Rules and Regulations and for engineering information.

RESULTS

The results obtained and their relationship to the Rules and Regulations of the San Bernardino County APCD are shown below.

Source	Flowrate SCFM (dry)	NOx ppm	CO Measured ppm	CO Allowable ppm	PARTICULATE MATTER Measured	PARTICULATE MATTER Allowable
Furnace	259	420	340	2,000	0.044 lbs/hr 0.0198 Grs/SCF	1.18 lbs/hr 0.20 Grs/SCF
Retort	971	210	50	2,000	0.418	1.18

RECOMMENDATIONS

It is recommended that the permit to operate be issued for this unit, since its emissions meet the limitations of the San Bernardino County Rules and Regulations.

B1-15

SUMMARY: EMISSIONS TO ATMOSPHERE UNCONFIDENTIAL

New Sources and Existing Sources After January 1, 1975

Name of Firm - Pan American Resources — Date Test: Nov. 22, 1974

Location: Upland, CA — Page ____ of ____

Type of Operation: Incinerator — Process Weight: 330 lbs.

Unit Tested: Retort

Gas Flow Rate, SCFM: 971

Gas Temperature, °F: 500

		Measured Emissions		Allowable Emissions	
Rule 50A	Visible Emissions		Ringelmann	#1	Ringelma
Rule 52A	Particulate Matter	0.0517	Grs/SCF (dry)	0.20	Grs/SCF
Rule 53A(a)	Sulfur Compounds as SO_2		PPM by Vol.	500	PPM by V
			Lbs/hr		
Rule 53A(b)	Combustion Contaminants		Grs/SCF @ 12% CO_2	0.1	Grs/SCF @ 12% C
Rule 54A	Solid Particulate Matter	0.4195	Lbs/hr	1.19	Lbs/hr
Rule 58A	Disposal of Solid and Liquid Wastes (b) 100 lbs/hr		Grs/SCF @ 12% CO_2	0.1	Grs/SCF 12% CO_2
	(d) 100 lbs/hr		Grs/SCF @ 12% CO_2	0.3	Grs/SCF 12% CO_2
Rule 66	Solvents (reactive hydrocarbons measured as methane)		PPM Inlet		
			PPM Outlet		
			% Conversion	90	% Conver
			Lbs/day		Lbs/day
Rule 68	Oxides of Nitrogen as NO_2 (Unit 1775 Million BTU/hr)		PPM @ 3% O_2 Gas	125	PPM @ 3
			PPM @ 3% O_2 Oil	225	PPM @ 3
Rule 71	Carbon Monoxide	50	PPM by Vol.	2000	PPM by V
Information Data	CO_2		% by Vol.		
	NO_x as NO_2	210	PPM by Vol.		
	Other				

Comments:

35-45

SUMMARY: EMISSIONS TO ATMOSPHERE
New Sources and Existing Sources After January 1, 1975

Name of Firm: Pan American Resources — Date Test: Nov. 22, 1974

Location: Upland, CA — Page ____ of ____

Type of Operation: Incinerator — Process Weight: 330 lbs/

Unit Tested: Furnace

Gas Flow Rate, SCFM: 259

Gas Temperature, °F: 930

		Measured Emissions		Allowable Emissions	
Rule 50A	Visible Emissions		Ringelmann	#1	Ringelma
Rule 52A	Particulate Matter	0.0198	Grs/SCF (dry)	0.20	Grs/SCF
Rule 53A(a)	Sulfur Compounds as SO_2		PPM by Vol.	500	PPM by V
			lbs/hr		
Rule 53A(b)	Combustion Contaminants		Grs/SCF @ 12% CO_2	0.1	Grs/SCF @ 12% CO
Rule 54A	Solid Particulate Matter	0.0441	lbs/hr	1.18	lbs/hr
Rule 58A	Disposal of Solid and Liquid Wastes (b) 100 lbs/hr		Grs/SCF @ 12% CO_2	0.1	Grs/SCF 12% CO_2
	(d) 100 lbs/hr		Grs/SCF @ 12% CO_2	0.3	Grs/SCF 12% CO_2
Rule 66	Solvents (reactive hydrocarbons measured as methane)		PPM Inlet		
			PPM Outlet		
			% Conversion	90	% Conver
			lbs/day		lbs/day
Rule 68	Oxides of Nitrogen as NO_2 (Unit 1775 Million BTU/hr)		PPM @ 3% O_2 Gas	125	PPM @ 3%
			PPM @ 3% O_2 Oil	225	PPM @ 3%
Rule 71	Carbon Monoxide	320	PPM by Vol.	2000	PPM by V
Information Data	CO_2	2.5	% by Vol.		
	NO_x as NO_2	~420	PPM by Vol.		
	Other				

Comments: